


**VEITH SYMPOSIUM**  
Connecting The Vascular Community

## The Importance Of Vascular Access Registries In Improving Clinical Outcomes

**Robert Shahverdyan**  
Vascular and Endovascular Surgeon  
Head of Vascular Access Center  
Hamburg, Germany

roboahshahverdyan robert-shahverdyan



**Disclosures:**

**VEITH SYMPOSIUM**  
Connecting The Vascular Community

X Consulting/Teaching: Becton Dickinson, Medtronic, Laminate medical, Bluegrass Vascular, Xeltis, VentureMed

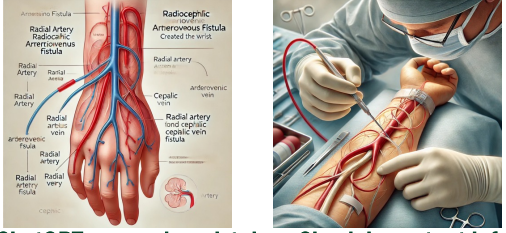
X Speaking: BrosMed medical, Cardionovum

X Advisory Board: Venova medical

Dr. Robert Shahverdyan

**Disclosures:**

No AI was used for today's presentation?????



**ChatGPT can make mistakes. Check Important Info.**

Dr. Robert Shahverdyan

### Randomized Controlled Trials (RCTs)

**Gold Standard:** Traditionally viewed as essential for data collection and guiding practice

**Challenges:**

- Limited selection criteria
- High costs and recruitment difficulties
- Challenging in vascular access studies (diversity, mortality, etc)

Dr. Robert Shahverdyan

### Evidence for Vascular Access

- Generally comes from conferences (or not)
- Scientific publications
  - have (partially) low to poor quality
  - Retrospective, short, small groups
- Come from centers of excellence
  - "One person to rule them all"
- Doesn't reflect real-world practice since bad outcomes are "kept hidden"

Dr. Robert Shahverdyan

### Vascular Access Registry

**Pros:**

- Generates high-quality, evidence-based data
- Reflects real-world practice patterns and outcomes
- Helps track effectiveness of procedures and devices

Dr. Robert Shahverdyan

## Vascular Access Registry

**Pros of Real-World Practice:**

- Provides a more comprehensive view than RCTs or conference reports
- Helps refine patient care pathways based on real-world data

### Germany – ESRD / RRT data

Germany has **NO** access registry

- NO DATA
- No real idea where we stand
- Many developing countries in the world have more data

### Dialysis Access in Germany

Around 100000 dialysis patients

| EV-Bereich            | Hämodialyse in Einzelzentren | Hämodialyse in | Peritonealdialyse |
|-----------------------|------------------------------|----------------|-------------------|
| Baden-Württemberg     | 93,91 %                      | 0,89 %         | 5,20 %            |
| Bayern                | 92,79 %                      | 0,99 %         | 6,25 %            |
| Berlin                | 92,89 %                      | 0,26 %         | 5,86 %            |
| Brandenburg           | 92,21 %                      | 0,49 %         | 7,30 %            |
| Bremen                | 95,42 %                      | 0,47 %         | 6,12 %            |
| Hamburg               | 93,39 %                      | 0,79 %         | 7,68 %            |
| Hessen                | 92,29 %                      | 0,89 %         | 5,76 %            |
| Mittelrhein/Oberrhein | 95,45 %                      | 0,95 %         | 4,06 %            |
| Niederrhein           | 92,34 %                      | 0,76 %         | 6,90 %            |
| Nordrhein             | 90,57 %                      | 0,85 %         | 6,59 %            |
| Rheinland-Pfalz       | 92,29 %                      | 0,77 %         | 6,78 %            |
| Saarland              | 97,00 %                      | 0,30 %         | 3,70 %            |
| Sachsen               | 93,80 %                      | 1,76 %         | 4,44 %            |
| Sachsen-Anhalt        | 93,24 %                      | 0,46 %         | 6,30 %            |
| Schleswig-Holstein    | 94,49 %                      | 0,76 %         | 6,25 %            |
| Thüringen             | 96,53 %                      | 0,36 %         | 3,17 %            |
| Westfalen-Lippe       | 92,62 %                      | 0,86 %         | 6,44 %            |
| <b>Deutschland</b>    | <b>93,34 %</b>               | <b>0,77 %</b>  | <b>5,98 %</b>     |

### Is there still hope?

## Certification as Interdisciplinary regional or referring VA-Center since 2017!

Deutsche Gesellschaft für Nephrologie (DGN)

Deutsche Gesellschaft für Gefäßchirurgie und Gefäßmedizin (DGG)

Deutsche Gesellschaft für Interventionelle Radiologie und minimal-invasive Therapie (DeGIR) in der Deutschen Röntgengesellschaft (DRG)

Die Deutsche Gesellschaft für Angiologie (DGA)

**DeGIR**

## WOW! 39 certified VA-centers in Germany!!!!!!!!



### Deutsches Shuntregister

- All registry data entered voluntarily!
- The data entered is not validated
- Data only from 16 centers
- Most of the data is incomplete

## Power of Vascular Access Registry

Peer-reviewed article | Research article | First published online September 21, 2020

Validating vascular access data in the Swedish Renal Registry SRR

Geoffrey Webster  and Regina Sjöquist  [View all authors and affiliations](#)

Volume 22, Issue 4 | <https://doi.org/10.1177/1729729820954737>

Contents | Get access | Cite article | Share options | Information, rights and permissions

**Abstract**


**Background:**  
All Swedish dialysis units register data on vascular access in the Swedish Renal Registry (SRR). This study assessed external and internal validity of vascular access data in the SRR and its use as a tool in clinical practice.

**Methods:**  
For external validation, all procedures for placed fistulas, open and endovascular reinterventions registered in the SRR in 2011 to 2017 were cross-matched with data from the Swedish National Patient Registry. A two-stage sampling selected 1260 dialysis units for internal validation. Data on current vascular access for 10 randomly selected patients at each unit were compared with medical record data. SRR data on placed fistulas from 2017 were cross-checked with data from local surgical units. Registrations of central venous catheters (CVCs) as temporary or permanent were used as a proxy for clinical utilisation of the registry and analysed separately.

**Swedish Renal Access Registry:**

- Since 1991
- Manual patient data insertion
- Reimbursed
- Validated by medical insurance data

Dr. Robert Stehouwer

 Maastricht UMC+

## Dutch vascular access registry

What have we learnt so far?

Maarten Snoeijis, MD PhD  
Department of Vascular Surgery  
Maastricht University Medical Center

Dr. Robert Stehouwer

## Conclusions


**RCTs:** essential but limited

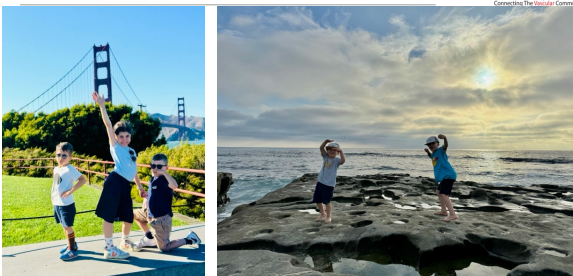
**Registries:** national vascular access registry is needed to improve clinical outcomes, and broadly accepted outcome measures have to be defined

**Future:** Combining both methods will enhance patient care in vascular access care

Dr. Robert Stehouwer

THANK YOU!

 VEITH SYMPOSIUM  
Connecting The Vascular Community



Dr. Robert Stehouwer